**WHAT IS CLAIMED IS:**

1. A method of creating VOBU in HD-DVD systems, comprising following steps:

a. gain HD-enh data streams and SD video data streams by dividing original HD video data streams;

b. all kinds of data streams including HD-enh video data streams, SD video data streams, and audio data streams are packed to HD-enh video data packet (V_PCK_HD), video data packet (V_PCK), and audio data packet (A_PCK) respectively to compose a series of VOBUs.

2. The method of claim 1, further comprising a step of writing the data in the VOBU into an optical disc in turn to create a HD-DVD disc.

3. The method of claim 1, further comprising a step of creating mapping file by a series of VOBUs to make HD_DVD disc.

4. The method of claim 2 or claim 3, wherein said V_PCK_HD data packet and related V_PCK data packet are sequenced adjacently in the same VOBU.

5. The method of claim 1, wherein said V_PCK_HD data packet and said V_PCK data packet can share the same A_PCK data packet in the VOBU.

6. The method of claim 1, wherein the HD-enh video data streams are packed to V_PCK_HD packet according to the defined structure of the V_PCK_HD data packet in said step b.

7. The method of claim 6, wherein the structure of the V_PCK_HD data packet is defined with a reserved Stream_ID, namely the identification mark of the stream, in

MPEG standards.

8. The method of claim 6, wherein the HD-enh video data is put into the private stream, and the structure of the V_PCK_HD data packet is defined with a reserved or provider defined Sub_Stream_ID, namely the identification mark of the sub-stream.

9. A kind of HD-DVD disc, wherein said disc contains V_PCK_HD data packet and V_PCK data packet.

10. The HD-DVD disc of claim 9, wherein said V_PCK_HD data packet and related V_PCK data packet are sequenced adjacently in the HD-DVD disc.

11. Means for creating VOBU in HD-DVD systems, comprising:

a segregating unit, used to divide original HD video data streams into HD-enh data streams and SD video data streams;

a multiplexer, used to pack all kinds of input data streams including HD-enh video data streams, SD video data streams, audio data streams into HD-enh video data packet (V_PCK_HD), video data packet (V_PCK), audio data packet (A_PCK) respectively composing a series of VOBUs; and the said segregating unit is joined with the multiplexer.

12. The means of claim 11, wherein said segregating unit comprises:

Means for resolution downgrade, used to downgrade the resolution of the input original HD video data streams;

SD encoder, used to encode the input data streams which have been

resolution-downgraded to gain SD video data streams, and transmit the SD video data streams to the multiplexer;

Decoder, used to decode the input SD video data streams;

Means for resolution upgrade, used to upgrade the resolution of the input decoded SD video data streams;

A differential means, used to perform differential process on the input data streams which have been resolution-upgraded and the input original HD video data streams;

HD-enh encoder, used to encode the data streams which have been differentiated to gain HD-enh video data streams, and transmit the HD-enh video data streams to the multiplexer.

13. The means of claim 11 or claim 12, wherein said multiplexer is the multiplexer which accords with DVD standards.

14. Means for playing HD-DVD disc, comprising:

optical wave picker, used to deal with the input VOBU data streams in the HD-DVD disc to gain V_PCK_HD data packet and V_PCK data packet;

HD-DVD decoder, used to respectively decode the V_PCK_HD data packet and V_PCK data packet to gain HD-enh video data streams and SD video data streams;

means for resolution upgrade, used to upgrade the resolution of the input SD video data streams;

means for overlapping, used to overlap the input SD video data streams which have been resolution upgraded with the input HD-enh video data streams to gain the output of the high definition TV.

15. The means of claim 14, wherein said HD-DVD decoder contains a V_PCK_HD buffer, a V_PCK buffer, a HD-enh decoder and a SD decoder, said V_PCK_HD buffer and the HD-enh decoder process the V_PCK_HD packet in turn to gain HD-enh video data streams, said V_PCK buffer and SD decoder deal with the V_PCK packet in turn to gain SD video data streams.